



Design and Development of Online Teaching System of Marketing Course Ideological and Political Based on PHP

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Abstract. With the help of the rapid development of Internet technology, the world economy has gradually formed a whole. Under the background of fierce trade competition, the country's demand and requirements for economic talents have increased in the same proportion. In order to further promote the development of China's market economy and cultivate the ideological and moral quality of economic talents, this paper constructs an online teaching system of marketing course ideological and political education based on PHP. The system takes computer as the development hardware, combines Web technology with multimedia technology, and takes curriculum ideology and politics as the teaching orientation, and carries out multi-level and all-round three-dimensional teaching for marketing specialty. Linux is selected as the system development environment, PHP is used as the scripting language for platform development, and ThinkPHP framework is introduced to improve the main functions of online teaching system. In the aspect of evaluation, AHP is used to calculate the data, which makes it more in line with the teaching practice and meets the needs of teachers and students.

Keywords: marketing teaching innovation · curriculum ideology and politics · online teaching system · PHP scripting language · AHP analytic hierarchy process

1 Introduction

Under the background of the booming market economy, how to occupy more market share in a short time has become the focus of exploration for major enterprises, and marketing has emerged. Marketing is a social activity with the fundamental purpose of stimulating and satisfying human desires and needs, and transforming potential value into real value through market operation. [1] Under the influence of social needs and requirements, the educational connotation of marketing specialty is more profound. In 2022, the Ministry of Education issued the Guiding Outline of Curriculum Ideological and Political Construction in Colleges and Universities, which pointed out that curriculum ideological and political construction should be integrated into the whole process of classroom construction, and new ideas and new models should be adopted to develop professional courses with ideological education significance for students. [2] Under this

background, as a training base for all kinds of talents, colleges and universities should actively explore ways to train talents that meet the needs of the public. Therefore, this paper combines marketing major with course ideological and political education, and constructs an online teaching system of marketing course ideological and political education based on PHP. While imparting professional knowledge to students, it molds good thinking habits for students, enables students to gradually form correct values and establish correct three views in a strong learning atmosphere, and lays a solid ideological foundation for their long-term development.

2 Key Technologies

2.1 PHP Scripting Language

As a popular Web application development language, PHP combines the characteristics of C language, Java and Perl and creates its own grammar. It can directly embed programs into HTML for execution, and its execution efficiency is much higher than CGI. It can encrypt and optimize code operation to improve the running speed, which is more suitable for the design and development of dynamic pages. PHP can also execute the compiled code to achieve the fundamental purpose of encrypting and optimizing the code operation, thus making the compiled code run more smoothly [3].

2.2 Development Environment

According to the technical requirements of the above-mentioned related applications, we can complete the configuration and deployment of the development environment of the online teaching system of marketing course ideological and political based on PHP. The overall development of the system is based on Web technology, taking Linux as the system development environment, choosing Apache server among the Web application servers, and then using PHP as the scripting language for platform development, and introducing ThinkPHP + Vue framework to improve the platform. [4] The system adopts the functions of Think-orm ORM class library extension, think-oracle Oracle driver extension and think-soar SQL statement optimization extension to enrich the system application. Finally, the MySQL database is used to store data, expand the platform content and complete the construction of the whole development environment. Through the above technical theory, the overall environment and tool configuration of online teaching system development are determined, and the feasibility of establishing online teaching system of marketing course ideological and political based on PHP is clarified.

3 Functional Implementation

3.1 Online Learning Module

This system divides users into two categories: teacher users and student users, and provides different services for different users, so as to ensure that the system can accurately meet the needs of users. When users access this system for the first time, they need to complete the user registration according to the page guidance, and then select a role to log in, and then start the subsequent operation. The login code is shown in Fig. 1 [5].

```

<!doctype html>
<html lang="en">
  <head>
    <meta charset="UTF-8">
    <title>User Registration Page</title>
  </head>
  <body>
    <form action="signup.php" method="post">
      <p> user name :<input type="text" name="name"></p>
      <p>password: <input type="text" name="password"></p>
      <p><input type="submit" name="submit" value="enroll"></p>
    </form>
  </body>
</html>

```

Fig. 1. User login code

Because the teaching of ideological and political course in marketing is difficult, students not only need to master complicated professional theoretical knowledge, but also learn advanced scientific ideas. Therefore, the system classifies the courses under the major, and students can choose freely. [6] The system will also recommend the corresponding real-time economic information for users according to the current hot spots, so as to enrich the knowledge reserves of student users. The recommendation of real-time information involves the calculation of the number of views, that is, the popularity of the information is determined according to the number of students' views and comments. The calculation formula used here is shown in Formula 1. G_i represents the popularity of various courses, L_t represents the amount of information viewed, I_i represents the initial quality of video, k represents the propagation speed of resources, and t represents the time. After the study, the system will push the actual case combined with current politics as an after-class discussion assignment to consolidate the students' knowledge and expand their thoughts [7].

$$G_i = \sum_t \frac{L_t + I_i}{(t + 1)^k} \quad (1)$$

3.2 Resource Innovation Module

In order to accomplish the fundamental task of ideological and political education, teachers should play a sufficient role in promoting it. As far as teaching design is concerned, teachers and users can improve the teaching content with the help of the huge resource pool of the system, and appropriately increase the integration of Chinese traditional culture, excellent ideas and marketing courses. [8] The resource query code is shown in Fig. 2. For example, when studying "Marketing", teachers can focus on various traditional holiday consumption examples and local enterprise marketing cases with national characteristics when designing courseware, and compare them with books to enrich students' understanding of the current situation of social consumption in a subtle way. In terms of teaching methods, teachers can innovate the existing teaching methods. Combining single book teaching with practice teaching can provide students with rich practical ways to achieve the educational goal of "learning to promote knowledge" and improve their professional ability.

```

while True:
    query_content = input('Please enter the keywords that you want to retrieve: ')
    results = search_engine.search(query_content)
    print('Total found {} result(s):'.format(len(results)))
    for result in results:
        print(result)
    
```

Fig. 2. The query function implementation code

Table 1. Results of the learning effect assessment

Target layer	Measures layer	Weighted value	Item score	Score
Learning effect score	Course study duration	$A_1 = 0.312$	80	10.327
	Comprehensive practice participation	$A_2 = 0.632$	86	31.534
	Work completion	$A_3 = 0.429$	82	11.339

3.3 Comprehensive Evaluation Module

After the study, the system will evaluate the students’ comprehensive scores in a multi-dimensional way, and the final total score calculation formula is shown in Formula 2. Among them, O represents the final grade, P represents the usual grade, Q represents the final grade, and the teacher’s grade is replaced by J, r represents the different grades of the assessment points, and i represents the confidence of the process evaluation. The final evaluation results of students’ learning effect are shown in Table 1. [9] The establishment of this module not only improves the authenticity of the evaluation of ideological and political learning effect of marketing courses in colleges and universities, but also gradually improves the overall evaluation system of higher education [10].

$$O = \sum_{i=1} [(Q_r \times 30\%) + (P_i \times 30\%)] + \sum_r (J \times 40\%) \tag{2}$$

4 Conclusion

With the further development of economy, the proportion of market economy is becoming more and more serious. In order to further meet the needs of society and individuals, this paper constructs an online teaching system of marketing course ideological and political based on PHP. The system combines the advantages of market resources with

economic teaching mode to update the teaching content of marketing specialty in colleges and universities. In the learning process, students can not only master professional knowledge but also learn advanced ideas, laying a foundation for students' long-term development.

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